

Claims

What is claimed is:

1. A multi-ch optical transceiver module, comprising:
 - a) a plurality of optical subassemblies (OSA) for transforming the received multi-ch optical signals to multi-ch electrical signals, and transforming the multi-ch electrical signals to multi-ch optical signals separately for transmission;
 - b) a plurality of special signal processing IC units for disposing the multi-ch electrical signals received from the plurality of OSA units and for inputting multi-ch electrical signals to the plurality of OSA units for transmission;
 - c) an electrical connector unit for outputting multi-ch electrical signals disposed by the special signal processing IC units and for providing received multi-ch electrical signals to the special signal processing IC units for disposal;
2. The multi-ch optical transceiver module of claim 1, further comprising a MPU, for monitoring operation status of said plurality of OSA units and said special signal processing IC units so as to send out monitoring information.
3. The multi-ch optical transceiver module of claim 2, further comprising an EEPROM, for recording said monitoring information.
4. The multi-ch optical transceiver module of claim 3, further including an ESD grounding unit, for shielding the electromagnetic interference aroused when electrical connector unit transmits electrical signal.

5. The multi-ch optical transceiver module of claim 4, further including a plurality of optical connector mounting sets, for fixing said plurality of OSA units.
6. The multi-ch optical transceiver module of claim 5 is put in a module case unit comprising an upper case and a base case, wherein a handle is jointed to the base case or the upper case of the module case unit for easy plug-in or pullout the multi-ch optical transceiver module.
7. The multi-ch optical transceiver module of claim 6, wherein at least one indicating light is set in the leading face of the multi-channels optical transceiver module to indicate the operation state of the module according to said monitoring information.
8. The multi-ch optical transceiver module of claim 6, wherein said special signal processing IC units, said MPU and said EEPROM are set at a printed circuit board.
9. The multi-ch optical transceiver module of claim 8, wherein said printed circuit board is placed on a fixed board in said module case unit, the upper case, or the base case of said module case unit.
10. A multi-ch optical transceiver module as stated in claim 8, wherein the multi OSA are placed on the fixed board in the relate module case unit, the upper case, or the base case of the relate module case unit.